

Amendments to the Abstract:

Please replace the abstract on page 23 with the following replacement abstract:

~~The present invention provides high throughput screening systems for identifying compounds that modulate the biological activity of a biochemically functional sarcomere. The method can be performed in plurality simultaneously with fluorescence or absorbance readouts.~~

Methods for purifying actin are provided. The methods generally involve the addition of a magnesium salt in a sufficient quantity, whereby G-actin polymerizes to form actin paracrystals, which can be recovered as a purified form of actin.